

## **Comparisons:**

- English and Portuguese trees:
  - The chosen sentences for both languages, English and Portuguese, were numbers 2, 8 and 14 of the corpus. For both languages some “classification” differences were observed, due to my previous knowledge of syntactic trees construction, as for example, the core of a NP was broken down as  $NP \rightarrow CN \rightarrow N$ , and I had learned  $NP \rightarrow N$ , there wouldn’t be the intermediate step specifying the noun as common noun.
  - Another difference also for both languages was how some of the branches were generated. In sentence 8, for example, the verb tell is ditransitive - that means that both “police” and “that the victim had attacked the suspect in april” should come from the VP branch, and, in the generated tree, only “police” is coming from the VP. Same for “in april”, even though the sentence is ambiguous, being possible that “april” refers to “attack” or “tell”, it also should come directly from the branch of the verbs, which also doesn’t happen.
  
- **Grammar modifications:**
  - To start with, when testing the english grammar for the portuguese data the udScore was 49,7%, when using the modified grammar to suit Portuguese it was possible to put the value up to 57,2 % using the macro evaluation.
  - A very few sentence rules were altered, since every time I tried to add rules that were more specific for Portuguese, the score would go incredibly low. And when looking at the sentences that the grammar should be able to satisfy and trying to capture the rules, very few tries really make a change, most of them didn’t make any difference.
  - To raise up the values all the lexicon was translated from English to Portuguese and also increased, since Portuguese has, for example, more kinds of conjunctions. For the sentences, versions of the rules that did not use auxiliaries as “do” were also added - if I tried to delete rules, the score would also drop. Some other changes such as adding a rule for

capturing different positions for the adjective in the sentence was also done, among other small changes.